High-Temperature Analysis of Polyether Sulfone

Application Note

Materials Testing and Research, Polymers

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Introduction

Elevated temperature is preferred for the analysis of polyether sulfones to reduce operating pressure and improve resolution by reducing solvent viscosity. This particular sample was readily soluble in DMF at room temperature. Agilent PLgel 5 µm MIXED-C columns are well suited to the analysis of polyether sulfones.

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PLgel 5 µm MIXED-c columns are designed for rapid polymer analysis. With its linear calibration up to 2 million MW, this is the column of choice for highest resolution and accuracy in molecular weight distribution analyses. Rapid solvent change capability, excellent temperature stability and the high resolution of the PLgel 5 µm MIXED-C also provide the versatility essential for today's R&D laboratory.

Conditions

Columns:	2 x PLgel 5 µm MIXED-C, 300 x 7.5 mm (part number PL1110-6500)
Eluent:	DMF + 0.1% LiBr
Flow Rate:	1.0 mL/min
Temperature:	60 °C
Detection:	390-MDS Multi Detector Suite (differential refractive index)

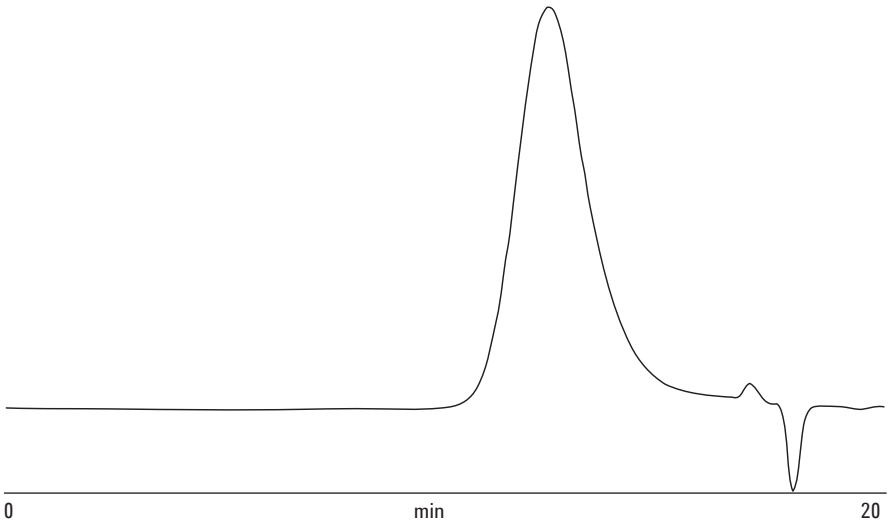

Figure 1. Analysis of polyether sulfone using PLgel 5 µm MIXED-C columns

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